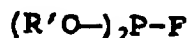


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ETHYL



Formula VI

wherein R' is a substituted aryl group wherein the substituents are selected from sec-alkyl, tert-alkyl, aralkyl, cycloalkyl, hydroxy, alkoxy, aryloxy, halo, acyloxy, and alkoxy carbonyl alkyl:]



Formula II

wherein R<sup>1</sup> and R<sup>2</sup> are substituted or unsubstituted [aryl] phenyl groups wherein the [substituent] substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, [hydroxy,] alkoxy, aryloxy, and halo[:], and X is selected from the group consisting of a single bond connecting R<sup>1</sup> and R<sup>2</sup> and divalent bridging groups selected from divalent aliphatic hydrocarbon groups containing 1-12 carbon atoms, —O— and —S<sub>q</sub>— wherein q is an integer from 1 to 3[:], and wherein aryl is selected from the group consisting of phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl and 4-sec-hexylphenyl.

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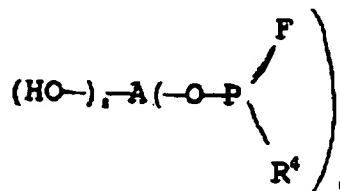


Formula III

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ETHYL

wherein R is a substituted or unsubstituted aryl group wherein the substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, hydroxy, alkoxy, aryloxy, halo, alkoxycarbonyl, alkoxycarbonyl-alkyl and acyloxy, and R<sup>3</sup> is selected from the group consisting of alkyl, cycloalkyl, aralkyl, aryl, substituted aryl, alkoxy, cycloalkoxy and aralkoxy; and



Formula IV

wherein A is a mono- or poly-nuclear aromatic group, R<sup>4</sup> is independently selected from fluorine, aryloxy, alkylaryloxy, alkoxy and polyalkoxy, r is an integer from 1 to 4, s is an integer from 0 to 3 and (r + s) equals the valence of A.]

[2. A compound of claim 1 namely bis(2,6-di-tertbutylphenyl) fluorophosphite.]

[3. A compound of claim 1 namely: bis(2,4-di-tertbutylphenyl) fluorophosphite.]

[4. A compound of claim 1 namely bis(4-octadecyloxycarbonyl-ethyl-2,6-di-tert-butylphenyl) fluorophosphite.]

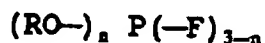
[6. A compound of claim 1 namely: bis-difluorophosphite ester) of 4,4'-methylenebis(2,6-di-tert-butylphenol).]

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ETHYL

I 171 173  
 8. (Amended) [Organic material] A polymer of an olefinically unsaturated monomer normally susceptible to gradual oxidative degradation when in contact with oxygen, [said organic material] and having incorporated therein by mixing or spraying [containing] an antioxidant amount of an aromatic fluorophosphorus compound, said compound being characterized by having at least one benzene group bonded through oxygen to a trivalent phosphorus atom and at least one fluorine atom bonded to said phosphorus atom.

9. An organic composition of claim 8 wherein said fluorophosphorus compound is selected from the group consisting of compounds having the structures:



Formula I

I 171 173  
 wherein R is a substituted or unsubstituted [aryl] phenyl group wherein the substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, [hydroxy,] alkoxy, aryloxy, halo, alkoxycarbonyl, alkoxycarbonylalkyl and acyloxy and n is 1 or 2, and wherein aryl is selected from the group consisting of phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl and 4-sec-hexylphenyl;



Formula II

T290X

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ETHYL

I 171 173 wherein  $R^1$  and  $R^2$  are substituted or unsubstituted [aryl] phenyl groups wherein the substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, [hydroxy,] alkoxy, aryloxy and halo, and X is selected [rom] from the group consisting of a single bond connecting  $R^1$  and  $R^2$  and divalent bridging groups selected from divalent aliphatic hydrocarbons containing 1-12 carbon atoms, —O— and —S<sub>q</sub>— wherein q is an integer from 1 to 3[;], and wherein aryl is selected from the group consisting of phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl and 4-sec-hexylphenyl; and

R-O

\

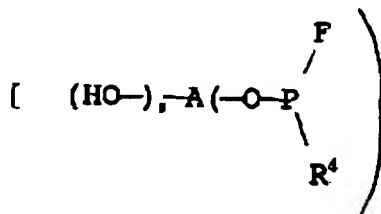
P-F

Formula III

/

 $R^3$ 

I 171 173 wherein R is as previously defined for Formula I and [R<sub>3</sub>]  $R^3$  is selected from the group consisting of alkyl, cycloalkyl, aralkyl, aryl, substituted aryl, alkoxy, cycloalkoxy, aryloxy and aralkoxy[; and], and wherein aryl is selected from the group consisting of phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl and 4-sec-hexylphenyl.



Formula IV

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ETHYL

wherein A is a mono or polynuclear aromatic group, R<sup>4</sup> is independently selected from fluorine, aryloxy, alkaryloxy, alkoxy and polyalkoxy and r is an integer from 1 to 4, s is an integer from 0 to 3 and (r+s) equals the valence of A].

[10. A composition of claim 8 wherein said organic material is a polymer of an olefinically unsaturated monomer.]

11. A composition of claim [9] 44 wherein said organic material is a polymer of an olefinically unsaturated monomer.

12. A composition of claim [11] 2 wherein said compound has Formula I[.] and R is a substituted phenyl group.

13. A composition of claim 12 wherein n is 2 and said substituents are selected from alkyls having 1-20 carbon atoms, [aryl's having 6-12 carbon atoms] phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl, 4-sec-hexylphenyl, aralkyls having 7-12 carbon atoms, cycloalkyls having 5-8 carbon atoms, [hydroxy,] alkoxy having 1-12 carbon atoms, aryloxy having 6-12 carbon atoms, halo, [alkoxycarbonylalkyl having 1-20 carbon atoms in its alkoxy moiety and 1-3 carbon atoms in its alkyl moiety, alkoxycarbonyl having 1-20 carbon atoms in its alkoxy moiety] and acyloxy having 1-4 carbon atoms.

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ETHYL

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14. A composition of claim 13 wherein said substituents are selected from alkyl having 1-20 carbon atoms [and alkoxy carbonylalkyl having 1-20 carbon atoms in its alkoxy moiety and 4 1-3 carbon atoms in its alkyl moiety].

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17. A composition of claim [14] 12 wherein said fluorophosphite compound is bis(4-octadecyloxycarbonylethyl-2,6-di-tert-butylphenyl) fluorophosphite.

171  
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19. A composition of claim 9 wherein said fluorophosphite compound has Formula II wherein said substituents are selected from alkyl having 1-20 carbon atoms, [aryl having 6-12 carbon atoms,] phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl, 4-sec-hexylphenyl, aralkyl having 7-12 carbon atoms, cycloalkyl having 5-8 carbon atoms, [hydroxy,] alkoxy having 1-12 carbon [toms] atoms, aryloxy having 6-12 carbon atoms and halo, and X is selected from the group consisting of a single bond connecting R<sup>1</sup> and R<sup>2</sup> and divalent bridging groups selected from divalent aliphatic hydrocarbon groups containing 1-12 carbon atoms, -O- and -S<sub>q</sub>- wherein q is an integer from 1-3.

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23. A composition of claim 20 wherein said fluorophosphite compound is [22,2,] 2,2'-bis(4,6-di-tert-butylphenyl) fluorophosphite.

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24. A composition of claim 9 wherein said fluorophosphorus compound has Formula III wherein said substituents are selected from alkyls having 1-20 carbon atoms, [aryls

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ETHYL

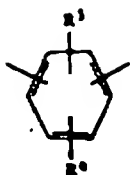
I 173 having 6-12 carbon atoms,] phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl, 4-sec-  
173 hexylphenyl, aralkyls having 7-12 carbon atoms, cycloalkyls having 5-8 carbon atoms,  
[hydroxy,] alkoxy having 1-12 carbon atoms, aryloxy having 6-12 carbon atoms, halo,  
alkoxycarbonylalkyl having 1-20 carbon atoms in its alkoxy moiety and 1-3 carbon atoms in its  
alkyl moiety, alkoxycarbonyl having 1-20 carbon atoms in its alkoxy moiety and acyloxy having  
1-4 carbon atoms, and R<sup>3</sup> is selected from alkyl having 1-20 carbon atoms, cycloalkyl having  
171 173 5-8 carbon atoms and aralkyls having 7-12 carbon atoms which are bonded through [oxygen]  
I oxygen to phosphorus and aryls having 6-12 carbon atoms, alkyl having 1-20 carbon atoms,  
cycloalkyls having 5-8 carbon atoms and aralkyls having 7-12 carbon atoms which are bonded  
directly to said phosphorus.

171 [25. A composition of claim 9 wherein said fluorophosphorus compound has  
173 Formula IV.]

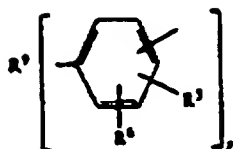
171 [26. A composition of claim 25 wherein A has a structure selected from:

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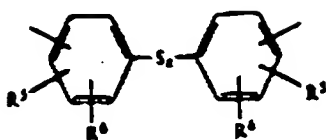
AN 5585/RE



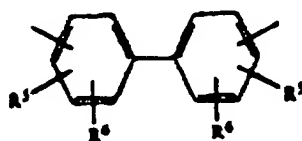
Structure IV (i)



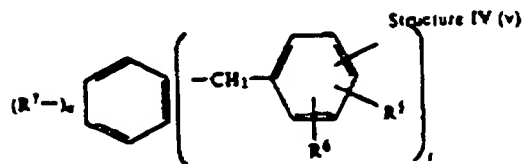
Structure IV (ii)



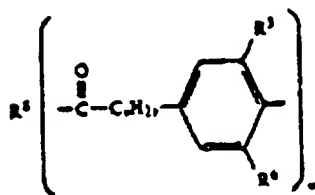
Structure IV (iii)



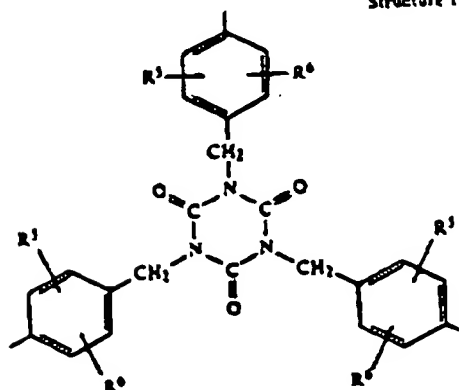
Structure IV (iv)



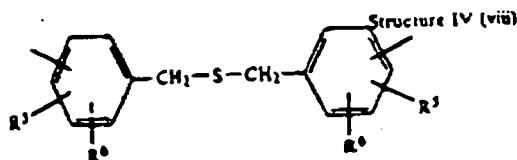
Structure IV (v)



Structure IV (vi)



Structure IV (vii)



Structure IV (viii)



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ETHYL

wherein  $R^5$  and  $R^6$  are hydrogen or alkyl having 1-12 carbon atoms,  $y$  is an integer from 2 to 3,  $x$  is an integer from 1 to 3,  $t$  is an integer from 2 to 3,  $u$  is an integer from 0 to 4,  $(t+u)$  equals 2 to 6,  $w$  is an integer from 1 to 4,  $R^7$  is hydrogen or an alkyl having 1 to 6 carbon atoms,  $R^8$  is an aliphatic hydrocarbon radical having 1-30 carbon atoms and having valence  $w$ ,  $v$  is an integer from 0-4,  $R^9$  is an aliphatic hydrocarbon radical having 1 to 6 carbon atoms and having valence  $y$ .]

[27. A composition of claim 26 wherein said fluorophosphorus compound is 2,5-

di-tert-butyl-1,4-phenylene bis (difluorophosphite).]

[28. A composition of claim 26 wherein said fluorophosphorus compound is 4,4'-

methylenebis(2,6-di-tert-butylphenyl) bis(difluorophosphite).]

[29. A composition of claim 26 wherein said fluorophosphite compound is the

tris(difluorophosphite ester) of 1,3,5-tris(3,5-di-tert-butyl-4-hydroxybenzyl)-2,4,6-trimethyl benzene.]

[30. A composition of claim 26 wherein said fluorophosphorus compound is the

tetrakis(difluorophosphite ester) of tetrakis(methylene 3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionate)methane.]

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ETHYL

DB  
Okt  
[31. A composition if claim 26 wherein said fluorophosphite compound is  
173 difluorophosphite ester of octadecyl 3-(3,5,-di-tert-butylhydroxyphenyl)propionate.]

OP 171  
[41. An organic composition of claim 39 further characterized by containing  
173 about 0.005-5 wt. percent of a phenolic antioxidant.]

171  
[42. An organic composition of claim 25 further characterized by containing  
173 about 0.005 -5 wt. percent of a phenolic antioxidant.]

I  
--43. A aromatic fluorophosphorus compound suitable for use as an antioxidant,  
said compound being selected from the group consisting of bis(2,4-di-tert-butylphenyl)  
fluorophosphite; bis(4-octadecyloxycarbonyl-ethyl-2,6-di-tert-butylphenyl) fluorophosphite; and  
4,4'-methylenebis(2,6-di-tert-butylphenyl)bis (difluorophosphite).--

--44. A compound of claim 1 combined in an antioxidant amount with an organic  
material normally susceptible to gradual oxidative degradation when in contact with oxygen.--

### REMARKS

Applicants respectfully request reconsideration in view of the amendment and the following remarks. This Amendment lists all the changes made to claims throughout the entire reissue prosecution. Claim 8 has been amended as suggested by the Examiner. A supplemental